

NARRATIVE

TO: Hamid Yavari
FROM: S. Ganapathy
DATE: December 6, 2022

Facility Name: **Tyson Farms, Inc., River Valley Ingredients - Alma**
AIRS No.: 005-00010
Location: Alma, GA (Bacon County)
Application #: 28552
Date of Application: August 4, 2022, September 12, 2022 and October 3, 2022

Background Information

Tyson Farms, Inc., River Valley Ingredients - Alma is located on 1255 US Hwy. 1, Alma, Bacon County, Georgia. This facility renders poultry by-products, producing poultry meal, feather meal, and poultry fat. It has been operating as a synthetic minor (SM) source, regarding Title V Rules, under Air Quality Permit No. 2077-005-0010-S-04-0 issued December 10, 2021. The area is attainment for all criteria air pollutants.

The Tyson Farms, Inc., River Valley Ingredients Alma facility produces poultry meal, poultry fat, and feather meal. Raw products such as raw poultry meat pieces, poultry blood, emulsified poultry fat (secondary poultry nutrients or SPN), and raw poultry feathers are shipped in via truck from poultry harvesting facilities.

Purpose of Application

The facility submitted SIP application dated August 4, 2022 (assigned as Application No. 28552) for removing differential pressure monitoring from E1(b) venturi scrubber. No public advisory was issued for this application since there will be no increase in emissions of any pollutant and no new source is being added to the facility. The Permittee also requested that the frequency of recording of the scrubber parameters be reduced, since these parameters are manually recorded and recording them every two hours of operation imposes a huge burden on the plant personnel. They also assured that recording these parameters less frequently will not result in any adverse impact on the plant emissions.

This permit amendment application is for removing the differential pressure monitoring parameter from the venturi scrubber E1 (b) (E 10C) from the permit. The venturi scrubber operates as a closed loop with the packed bed scrubber E1 (c). The fan on the scrubber system is on the outlet side for the packed bed scrubber to allow air to be pulled through the venturi and the packed bed scrubber. The Permittee currently monitors recycle water flow through the venturi and both differential pressure and recycle water/chemical flow through the packed bed. There is no reason to monitor differential pressure of the venturi. The differential pressure through the venturi is set by recycle water flow which is monitored and the air through the system.

As long as recycled water flow through the venturi is monitored along with the differential pressure and recycle chemical flow through the packed bed scrubber, and the venturi is operating with air flow passing through it, it will operate per manufacturer's specifications. This amendments also defines an excursion of the scrubber flow rate.

Emissions Summary

There is no change in emissions from the proposed permit amendment. The facility continues to remain a synthetic minor source for VOC emissions.

Regulatory Applicability

There is no change to the currently applicable regulations to the venturi scrubber.

Permit Conditions

Existing Condition 5.4.d. is amended by removing the venturi scrubber E1 (b) from the differential pressure monitoring and by requiring these parameters to be recorded once every four hours.

Existing Condition 7.9 is amended by clarifying that venturi scrubber E1 (b) is not subject to the differential pressure drop recordkeeping requirement and that the scrubber parameter recording frequency is once every four hours the process is in operation.

In Condition 7.10.e Scrubber E1(b) is removed and the excursion of scrubber flow rate is defined as any two consecutive flow rate reading that is outside the scrubber flow rates specified in this condition. This same applies to all other scrubber parameters that are monitored.

In Condition 7.11 condition 7.10 is added to the list of conditions which contribute to the semi-annual reporting required in this condition.

Summary & Recommendations

I recommend issuing the proposed Air Quality Permit No. 2077-005-0010-S-04-1 for removing the differential pressure monitoring requirement for venturi scrubber E1 (b) from Conditions 5.4.d and 7.9 and to requiring recording of the scrubber parameters every four hours and for defining excursion of the scrubber flow rate as any two consecutive flowrate reading outside the range specified in Condition 7.10. No Public Advisory is required for this permit application. This facility is located within Coastal District Office – Brunswick for the purpose of inspection and reporting. Application fee of \$2,000 was paid on August 29, 2022.